WIRELESS TRANSCEIVER SYSTEM

TDSS-900-PNA

User Guide

900MHz Series

Version 1.5.2

- Read this user's guide carefully for safe operation and proper use of the product .
- Features and specifications are subject to change without notification.

RECOMMENDATIONS

- Prior to use, charge TX at least 3 hours
- Disconnect the battery or switch the power OFF.
  when TX Set is not in use for long periods
- Charge TX Set when not in use for short periods

TROUBLESHOOTING

Problems	Check Points
No reception	- Check the battery status - Check the connection and cables - Check the communication range
Poor reception, static, noise	- Change the location of RX Set - Check the communication range - Check to see if unit is placed near TV, speakers, or other electronic devices
Unit does not respond	- Check the battery status - Check the power switch on the bottom of the unit - Check the connection and cables

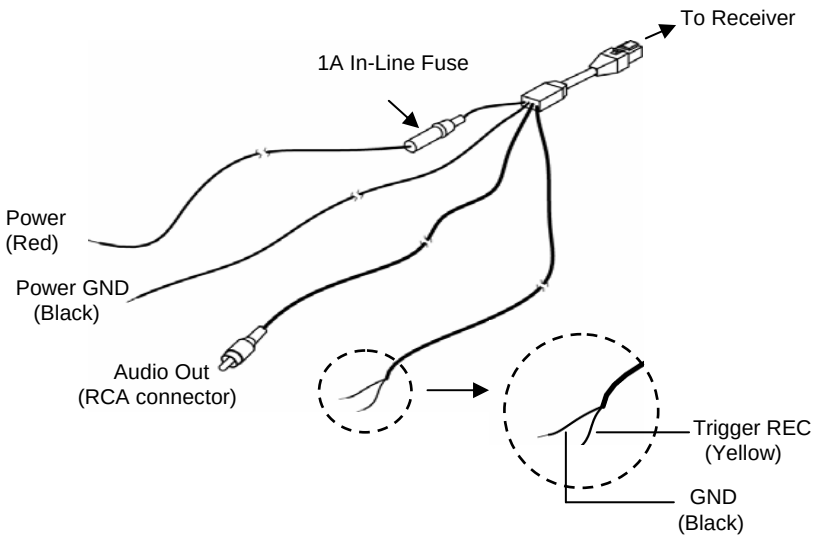
TIP2 Preserving the Batteries

In order to maintain the optimum capacity of the rechargeable battery pack, the unit has to be fully discharged (by using) approximately every 6 months. Then recharge the battery to full capacity again.

BOX CONTENTS

1. Transmitter (TX)
2. Receiver (RX)
3. Plug-In Microphone (MONO)
4. Mounting Bracket for Receiver with screw
5. Rechargeable Li-Ion Battery
6. Leather Pouch
7. External antenna
8. Desktop charger for transmitter
9. AC Power supply for desktop charger
10. Charger Stand for Desktop Charger
11. Straight Type internal antenna
12. RF Main Cable
13. In-car MIC
14. Instruction Manual

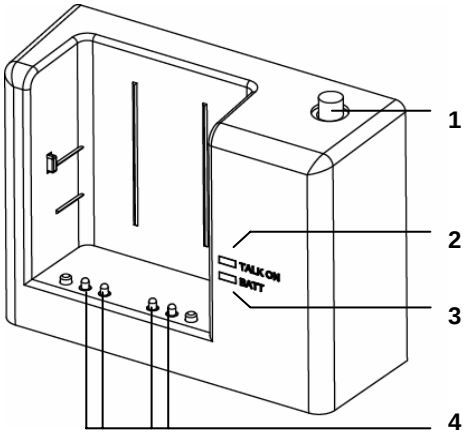
DESCRIPION – Main Cable



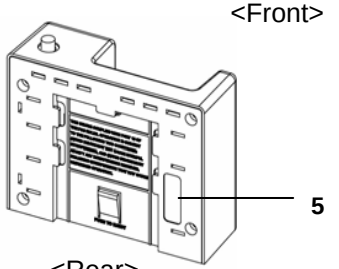
Connection with the system

- Power DC12V (Red), Power GND (Black): Power Cables to engine battery.
- Audio Out (RCA Connector): Connects to "AUDIO IN 1" port in the back of recorder.
- Trigger REC (Yellow): Connect to GPIO1 brown cable.
- GND (Black): Connect to GPIO black cable.

DESCRIPION - Receiver



<Front>



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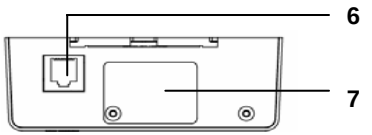


<Bottom>

1	Antenna Connection	5	Serial Number Label
2	Talk On (Green LED)	6	Main Cable Connection
3	BATT (Battery Status)	7	FCC Label
4	Charging Pin / Matching ID		

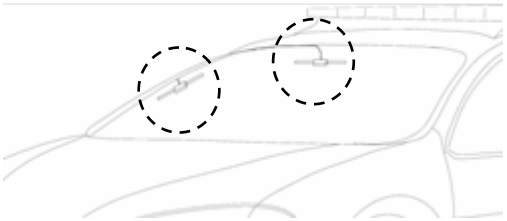
* # 2 Talk On LED
When TX triggers the recording of the system, green LED lights on.

* # 3 Charging Status
Red LED – In charging
Green LED – Fully Charged

OPERATION

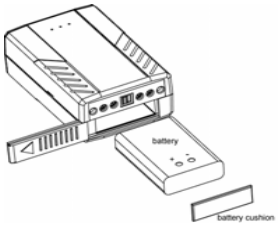
- Install the bracket by using the screws
- Slide RX Set onto the Bracket
- Connect the main cable to RX Set
- Connect the antenna (Internal Antenna or External Antenna to the RX Set.

* Place external antenna on the windshield at the point (Horizontal or Vertical) as following picture.

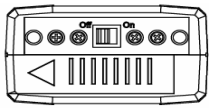


< External Antenna Installation >

- Put the battery pack into TX Set

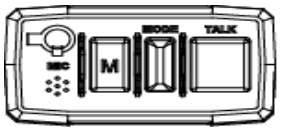


- Switch the power ON
  (located on the bottom of TX unit)



- Prior to use, charge the unit by placing TX set in the RX set at least for 3 hours
- Place TX on RX to sync the code

OPERATION



1. Charging mode
   - While TX is placed in RX (No LED on), charging the battery

2. TALK mode
   - While TX is displaced from Rx, TX TALK button will be standard mode on automatically in 3 seconds (LED blinking 2 times and then LED off).
     RX "TALK ON" LED will not be on since it's not recording.
   - While press TALK button on TX to trigger recording, TALK button turns blue LED on. RX "TALK ON" LED will light up and steady green

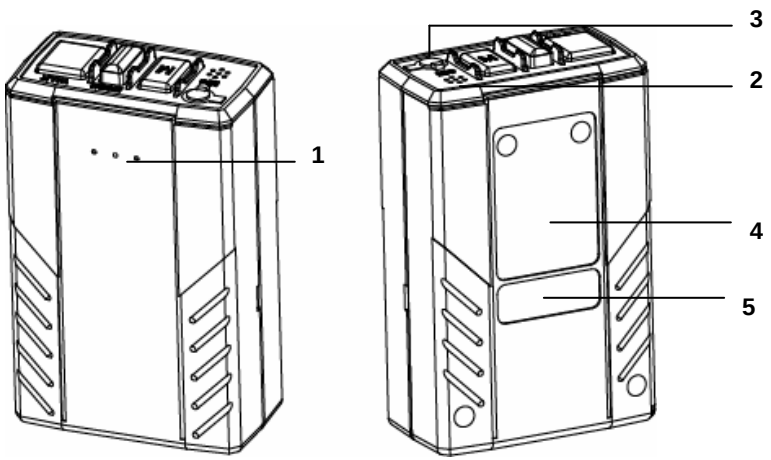
   * *<u>When TX is out of range, Blue talk button will be changed by mode,</u>*
     " LED off / Beep > LED off / Vibration > LED off / Beep+Vibration > LED off / None "
   * *While TX comes back in range, blue LED will be back on (steady).*

   * *<u>When the battery in low, blue talk button will be changed by mode</u>*
     "LED blink fast > LED off > LED blink fast > LED off "

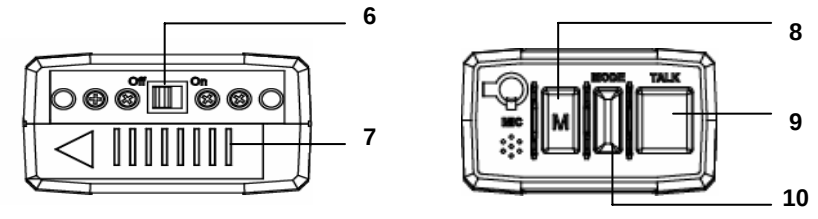
3. Warning MODE: MODE Selection button.
   When a user pushes this button, the mode is changing in order.
   " Beep Tone > Vibration > Beep and Vibration > None "

4. "**M**" : Mute Button
   When this button is pushed, audio data is not output during "Talk On" mode. Talk button will be changed with next mode order.
   " LED blink slow > LED off > LED blink slow > LED off "

DESCRIPTION - Transmitter



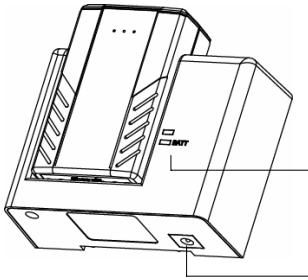
<Front> <Rear>



<Bottom> <Top>

1	Beep Tone	6	TX Power On/Off
2	Built-in MIC	7	Battery Cover
3	Microphone Jack	8	Mute Button
4	FCC Label	9	Talk Button
5	Serial Number Label	10	Mode Selection Button

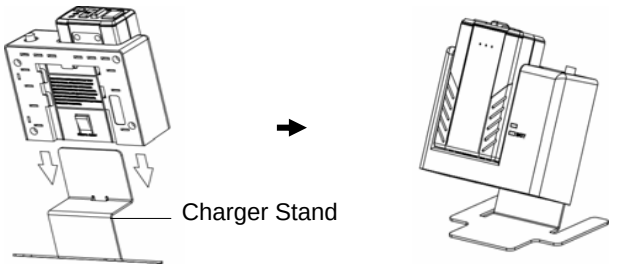
DESCRIPTION - HOME CHARGER



* Battery LED : In Charging – Red LED
Fully Charged – Green LED (4V ~ 4.2V)

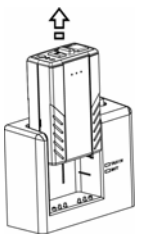
(Note) Place TX on the charger at least 4.5sec for the initializing.

Installation for Charger stand



TIP1 How to detach TX from RX and Home Charger

To prevent units from being broken by the improper use, detach TX unit from RX unit as the drawing described on the right picture.



CAUTION

- Use only provided antenna with RX Set
- Do not immerse in water or keep in humid areas
- Do not place near TV, speakers, or other electronic devices
- Before installation, check power supply and voltage to avoid hazards
- Do not apply force or shock to the unit
- Do not disassemble the unit
- Placement of items on the duty belt can restrict ready access to important equipment. The location of the wireless transmitter or any other device provided with this system that is carried on the officer's person should be chosen with care and consideration. After a location is selected, the officer should test access to and practice drawing primary items such as service firearms and secondary defense devices such as Aerosol Subject Restraint, Batons, Electronic Disruption Devices, etc. Proper operation of handheld radios and other signaling devices should also be tested as should access to handcuffs and other restraining devices

- Do not ware body-worn cords in such a way that can cause strangulation (i.e. loop around the neck or any other body part)

SPECIFICATION

Power	DC 12V for RX
Frequency (MHz)	902 ~ 927MHz Band Width
Number of Channel	20Channels
Channel Space	1.2MHz
Speech Coder	32Kbps ADPCM with parity
Type of Modulation	DBPSK SS MODULATION/DEMODULATION
Processing Gain	11dB
Data Rate	80Kbps Time Division Duplex
Frame Rate	1.92M Samples/s (2 Samples/Chip)
Receiver Sensitivity	-102dBm, -82dBm
Battery	Talking Time: 12Hours Charging Time: 3Hours
Battery Capacity	Lithium-ion 3.7V DC/ 2000mA
TX power levels	100mW, 10mW, 1mW
Temperature Range	-20°C ~ 60°C
Dimensions (WxDxH)	TX: 54mm x 30.5mm x 83.6mm RX: 104mm x38mm x 81.5mm